

Serial No. 10/734,660
Submission for RCE
Responsive to Office action dated September 8, 2005

REMARKS

By the present amendment, claims 1, 3, 9, 11, 13, and 18 have been amended; claims 8 and 14 have been cancelled. Claims 1-7, 9, 11-13, 15-16, and 18-24 are pending in the application.

Claims 1-7, 9-13, and 15-24 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. This rejection is respectfully traversed. The term "aqueous solvent system" has been defined in the claim using the identical terminology found in the specification. Therefore, it is requested that this rejection be withdrawn. Similarly it is believed that the amendments to the claims render the scope of protection sought to be definite. Therefore it is requested that the rejection under 35 U.S.C. 112, second paragraph be withdrawn.

Claims 1-7, 9-13, and 15-24 were rejected under 35 U.S.C.103(a) as being obvious over Oya (US 2001/51319A1). This rejection is respectfully traversed. The present invention improves an aqueous solvent-system photothermographic material which is coated from a coating solution with an aqueous solvent, and comprises three embodiments as set forth below:

1st embodiment:

- (a) a non-photosensitive organic silver salt having a silver behenate content of 90% by mole or more
- (b) a binder in the outermost layer having 50% by weight or more of a hydrophobic polymer latex,
- (c) an outermost layer contains a water-soluble gelling agent
- (d) the photothermographic material further comprises a gelation accelerator.

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2nd embodiment:

- (a) the outermost layer contains a polymer latex,
- (b) a layer adjacent to the outermost layer contains a water-soluble gelling agent
- (c) the photothermographic material further comprises a gelation accelerator.

3rd embodiment:

- (a) the outermost layer contains a polymer latex,
- (b) a coating solution for forming the outermost layer contains a water-soluble gelling agent, and
- (c) the photothermographic material further comprises a gelation accelerator.

Oya discloses an aqueous solvent-system photothermographic material having a non-photosensitive organic silver salt in which silver behenate is 85% by mole or more of the total organic silver salt. Oya also discloses a thickener (p.40, [0167]). The thickener is used to increase a viscosity of a coating solution to 1-200 cp, or preferably 5-100 cp higher than the initial viscosity. This thickener is not a gelling agent.

A gelling agent in the present invention is a compound which causes the loss of fluidity of a coated layer upon a decrease in temperature. The gelling agent in the present invention may increase the viscosity of a coating solution. A coating solution containing a thickener, as taught by Oya, may increase in viscosity upon a decrease in temperature, but all of the thickeners disclosed by Oya do not necessarily cause a coated layer to lose fluidity upon a decrease in temperature.

Oya does not disclose the configuration of layers required by the second embodiment of the present invention, wherein the outermost layer contains a polymer latex, and a layer adjacent to the outermost layer contains a water-soluble gelling agent

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which can cause the loss of fluidity of the outermost layer upon a decrease in temperature.

The thickener of Oya must be in a layer to cause an increase in viscosity, but the gelling agent is not necessarily required to be in the layer but may preferably be contained in a layer adjacent to the layer which will lose its fluidity. Consequently, the thickener in Oya and the gelling agent in the present invention are fundamentally different from each other in their function. Thus it is submitted that Oya does not teach or suggest the gelling agent of the present invention.

Further, Oya does not teach or suggest a gelation accelerator as set forth in the instant claims. As described on p.15, lines 3-10, the use of a gelation accelerator minimizes the amount of the gelling agent required. Because Oya does not teach or suggest the use of a gelling agent, there is no motivation to add a gelation accelerator as required by the present invention. Thus, Oya does not disclose elements (c) and (d) of the 1st embodiment, element (b) and (c) of the 2nd embodiment, and elements (b) and (c) of the 3rd embodiment; there is no teaching or suggestion to modify Oya to supply these missing elements.

Claims 1-7, 9-13, and 15-24 were rejected under 35 U.S.C.103(a) as being unpatentable over Oya (US 2001/51319A1) in view of to Derwent 1982-8459E and Andrews (U.S. Patent No. 4,113,854).

Oya fails to teach or suggest the combination of a gelling agent and a gelation accelerator as required by the instant claims. The secondary references are not in the field of the present invention nor are they directed to solving the same problem as that

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solved by the instant invention. Derwent '8459E is related to an adhesive for corrugated cardboard, and Andrews is related to chemicals for preventing mastitis. Consequently, it would not have not been obvious for a person of ordinary skill in the art to combine these references with Oya. Even if such references could be combined, they still fail to teach the combination of gelling agent and gelation accelerator of the claims.

In view of the foregoing amendments and remarks, it is respectfully submitted that all the claims in the application are in condition for allowance. Early and favorable action is respectfully requested.

Respectfully submitted,


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